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Communications.

SOME NOTES ON ARROW-WOUNDS.

BY ELLIOTT COUES, M. D., U. S. A.

During a residence of more than a year in the interior of Arizona Territory, as Surgeon of a United States Post, (Fort Whipple,) at a time when both our civil and military force was in incessant warfare with the hostile Apaché Indians, the writer had numerous cases of arrow-wounds under his care, in private practice as well as in the line of official duty. As reports of injuries of this sort are by no means often brought into general notice, to the following desultory notes of wounds produced by the peculiar stone-headed arrows of the Indians just named, some little interest may possibly attach.*

The Apaché arrow consists of a light tough reed, nearly or quite three feet long, at one end tri-feathered and slotted for the bow-string in the usual manner, and painted with some emblematical red and blue waved lines. Into the distal extremity is inserted a short and slender, but stout piece of firm wood, some eight or ten inches long, hardened and straightened in the fire, and thickly besmeared with a black gummy substance.

The head is apparently a small and trifling affair, compared with the results it is capable of producing. It is made from some species of quartz, chalcedony, obsidion, etc., and is always either white or black in color. It is an inch or somewhat less in length, by about a third of an inch in greatest width; in shape a narrow isosceles triangle. It is quite uniform in size and shape. I think I never saw one much over the dimensions stated. It is very thin, and its apex is chipped to an extremely fine point. Its sides have usually three, sometimes only one or two jagged notches near the base. Its bulbs are gen-

erally long and sharp. The base is notched where it rests on the shaft. In the end of the hard-wood shaft just described is a slight notch, actually not so deep as that which receives the bow-string; on which is dropped a little very tenacious gum; and then the stone-head is lightly pressed into place. There is no projecting handle for insertion into the wood. No thongs or wrapping of any sort are used; and so frail is the connection between the head and shaft, that the Indians themselves are obliged to carry their arrows with great care.

The bow is a large strong one, four to six feet long; almost straight to near either end, where it is abruptly much curved.

It will be seen that this weapon, the injuries from which we are to notice, is quite a different affair from the short, stout, heavy arrow, with a large and long triangular, or somewhat diamond-shaped soft metal head, bound by sinews to the shaft, used by the mounted Indians of the plains; although they agree in the respect, that both make very ugly wounds. I do not think that the penetrative force of the Apaché arrow equals that of the Comanché or Navajo. The characteristics of the Apaché arrow-head are essentially these: 1, its minute size; 2, its jagged edges and angles; 3, its extreme friability; 4, its very ready separation from the shaft; 5, its probable poisoning in some instances.

Case. Illustrating consequences of minute size of arrow-head. Arrow horizontally entered outer aspect of thigh of a large muscular man, its wide axis parallel with fibres of *m. vastus ext.*, severed profunda or one of its larger branches; haemorrhage to fainting, and repeated. Saw patient three hours from reception of injury; after he had ridden, supported on either side, for five miles. He had pulled out the shaft immediately upon being struck. Very moderate swelling or increased heat of limb. Orifice of entrance a simple slit, 3-10ths of an inch long. By no amount of delicacy and patience in the manipulation of a small silver probe, with the limb in various positions, could the former be introduced more than about an inch. Head consequently undetectable, and therefore unextractable. Expectant treatment necessitated; nothing special

* For a very elaborate memoir on arrow-wounds, see Dr. G. H. Bill, U. S. A., in the *Amer. Jour. Med. Sci.*, for Oct., 1862, p. 265; and compare nature of wounds by the strong, large, metal heads of the Navajos with those indicated in this paper.

to be done beyond ordinary constitutional care. The tumefaction rapidly abated; and the wound closed completely in a few days. No abscesses, or unusual amount of irritation from presence of stone; but the limb was weak and practically useless for several weeks. Two months afterward, the patient could *feel* the head on the inside of the thigh, close by the femoral; and motion, especially horse-back exercise, increased the vividness of his intelligent impression that there it was; although it was not to be detected by surgical palpation. It has already, or doubtless will be hereafter extracted by cutting in a manner not widely dissimilar from that for the operation of tying the femoral near the apex of Scarpa's triangle. This case is so well expressive of the essential characters of several others that fell to my lot, that they need not be here detailed. I soon learned to regard the innocent-looking little slit with anxious doubts of its directing me to the cause of it, when I saw it parallel with muscular fibres.

The above described kind of injury is evidently as near a "punctured" wound in essential characteristics, as can well be made by any *edged* weapon.

The jagged edges and sharp angles of the head, do not seem to be, at least in their effects upon muscular tissue, as pernicious as they are malevolent in appearance. They certainly must decrease rather than aid the penetrative force of the arrow; and the amount of laceration they are capable of producing is by no means a serious complication. I have thought indeed in some instances, that this degree of laceration was the reverse of deprecable; affording more facile entrance to the probe, and afterward more ready exit to the inevitable pus.

At the same time, the effect of these notches and angles is of importance with reference to the chances of the encysting of heads which cannot be traced and extracted. As might be expected, it is exceedingly rare that these sharply triangular and jagged bits of stone excite so little disturbance that the encysting process can be accomplished. This can only take place under some peculiarly favorable circumstances, as to position, etc. The irritation is almost invariably sufficient to excite suppuration; consequent abscesses, (unless the wound is very open;) and thus a gradual working of the head toward the surface; this "pointing" being often at a considerable distance from the place where it might have been expected. It is only rarely, I think that the head works out, *retrosum*, along the track of its entrance.

The extreme friability of the head produces results which must be taken into consideration, as one of the most common and troublesome features of the wound. When the head impacts on bone—and it generally traverses soft tissue till halted in this way—the chances of its shivering into bits vastly preponderate over the probability of its becoming fixed or glancing.

Case. Arrow-head struck under edge of malar, rasped off some periosteum, shivered as it glanced downward, and over twenty minute fragments, (in addition to two or three large ones extracted,) came away gradually from the fat and muscle lying under this bone.

Case. Arrow-head struck transverse process of eleventh dorsal vertebra; shivered; fortunate without glancing into the thorax. Three large pieces extracted immediately. Numerous smaller fragments came away in the suppuration.

Case. Arrow-head struck inferior angle of scapula. A large piece was at once extracted, which represented the whole of the head except about a fourth of an inch of its apex, which was firmly fixed in the bone. As this bit would not have been extractable except by much cutting, and then prying and wrenching, I somewhat hesitatingly allowed it to remain; possibly an injudicious procedure, although warranted by the result. The wound closed completely in about two weeks, and there were not, at least during the several subsequent months that I was with the patient—any unfavorable symptoms.

The above cases could be multiplied, but are sufficient for my present purpose. It will be evident that we need not be afraid of a little judicious audacity in the division of muscular tissue, while cutting a way for our forceps, since the enlarged orifice is favorable, if not indeed necessary, for the ready discharge of pus as well as of quartz débris. This same indication, so important to be fulfilled must also govern all subsequent dressing of the wound. *Dress openly*; better not dress at all, than occlude the orifice. Particularly be careful that subjacent tissue is sound, before allowing integument to reunite.

Occasionally an arrow-head will neither shiver nor impact; but on striking bone in an exposed situation, *e. g.*, tibia, ulna, etc., will rebound with great force. *Case.* Head struck middle of outer aspect of ulna, and rebounded. Resulting injury more of an ulcer than anything else. A scab rapidly formed; seeing which I merely protected it from friction by the clothes, and it "got well itself" directly.

So frail is the connection between the head and the shaft, that in all my little experience, I

never saw or heard of an instance in which the former was removed on pulling out the latter. I do not see very well how it can occur, provided the head be buried beyond its barbs. For the matter of that, as the shaft produces ordinarily next to nothing of the sum total of injury, we may regard the missile as practically consisting of the head alone. The shaft is almost invariably seized and jerked hurriedly out by the patient at the moment of being struck. The not the less comical because painful sight of a man thus porcupined rarely falls to the surgeon's lot, unless he is verdant or unlucky enough to get mixed up in a bush fight himself. But we must receive with great caution all opinions expressed by the patient, to the effect of his having withdrawn the head or even the whole of the shaft; for in the flurry of the moment, he does not examine what he so hurriedly pulls out; and the head he found in his clothes and presents triumphantly in proof was just as likely detached from some other arrow, which had not force to penetrate further. Again, his frantic wrenching at the stick may break off a portion of it inside. We cannot examine the wound too thoroughly before making a diagnosis. Let the following most interesting, and decidedly most mortifying case, which occurred in my private practice, exemplify these remarks.

Case. J. Blank, young and vigorous and moderately muscular subject. Arrow entered muscles on side of back of neck, and coursed downward and forward. The head was plainly to be felt just below the clavicle of the same side. The patient stated he had pulled out the shaft immediately on being struck, some twelve hours previously. Only experienced pain when my finger pressed on the head. Feeling the latter so plainly, in front, under the clavicle, and apparently only about half an inch deep, it by no means occurred to me to stick a probe into the wound some six inches or more, for the sake of feeling it from behind; but I at once prepared to extract the head. Seated on a stump, and my patient on a barrel in front of me, the heat and flies intolerable, and only a soldier to assist, I cut carefully down upon the head by an incision parallel with the under edge of the clavicle. I found it lying on the first rib, between it and the subclavian artery, which latter had been somewhat shoved aside, but luckily quite uninjured. The artery was directly under my finger, and I think I could have tied it in the last portion of its course, by slightly enlarging upon the operation. I extracted about three-fourths of the head in one large piece, and afterward nearly all the rest in another smaller

fragment; a little bit however, was left in, as I could not readily find it, and no one cares particularly to poke about with a probe in the supra-clavicular triangle. A great deal of pus had followed my reaching the head with the knife; the axilla was padded and strapped tightly in view of possible abscesses; and the wound dressed openly, trusting that the fragment would come out with the suppuration; as indeed was shortly afterward the case.

But still the cut I had made continued to discharge inordinate quantities of pus. The original wound meanwhile quite healed; while the cut whence the head was extracted assumed gradually the characters of a fistula and showed no signs of closing. The patient became weak and emaciated, with considerable hectic fever, though at no time confined to his bed. Serious and distressing pulmonary symptoms had come on, chiefly indicating abscess in the chest. The patient not being under my charge except for a few days immediately after the operation, I only saw him occasionally and accidentally, and therefore cannot give more detailed notes than the above. Meeting him one day, I was surprised to learn that a piece of the shaft of the arrow, about three inches in length, had been extracted from his chest, far into which it had gradually worked. At the time I operated, it must have been lying in the muscles of the side of the neck. Simple introduction of the probe from behind would have revealed its presence and saved the poor fellow much suffering, and myself much mortification; as it could have been drawn out with the utmost ease then, had I had an idea of its presence.

"Do the Apachés poison their arrows?" is a question often asked me; and it is currently reported that they dip the heads in a deer's liver, after forcing a rattlesnake to bite it, and then allowing it to putrefy. I reply most unhesitatingly that as a general rule they *do not*; no other than the consequences of mechanical violence following in the vast majority of instances. Still I cannot affirm that such is never the case; witness the following case, in which it is difficult to account for death except upon the supposition that some toxic agent complicated a simple wound.

Case. Private G. S., Co. F. 5th U. S. Inf. Arrow-head entered the muscles of the back, just over the lower part of the shoulder-blade; passed very obliquely upward and a little inward, chipping a bit off the scapular spine. The orifice of entrance was very small, and rounder and more jagged than usual. A probe passed to its full length readily enough, but no foreign body could

be felt by it. The man was positive that the head had come out when he drew the shaft; a statement, however, to be regarded as very problematical. He complained most of pain in the muscles of the side of the neck, which was swollen and stiff in about the locality to which I had been able to pass the probe. No suspicious substance could be detected after careful palpation; and a simple expectant plan of treatment was forced upon me. The wound soon began to suppurate profusely; the discharge at first tolerably "laudable," but quickly changed to a thin, ichorous, reddish-brown fluid; mixed with which was a considerable quantity of almost pure, very dark, clotted blood; and later, shreds or masses of apparently disintegrated tissue. The orifice was enlarged; and every precaution taken to facilitate discharge and prevent abscesses; nevertheless, they began to form rapidly, and at points down the back more and more remote from the original seat of the injury. These were evacuated as soon as detected. The patient began to rapidly sink under the profuse discharge; anorexia, insomnia, vomiting, diarrhoea, and an excessively irritable and desponding state of mind, successively made their appearance; in the latter stages there was considerable delirium; and finally, in spite of all that could be done for him, he died comatose, about three weeks after receiving the injury.

Autopsy revealed that all the muscles of that side, from the occiput nearly to the hip, were in a state of disintegration; dark-colored, soft in consistency, looking in fact much like decaying liver, and having an exceedingly offensive odor. The arrow-head could not be found, after a most diligent search. It had not penetrated the thorax, nor yet had it worked into the abdominal cavity; for the parietes of both were intact. To this day the exact course of the arrow, and why it should have produced such anomalous results remain a mystery to me. But I can affirm positively that the injury which proved fatal was confined to the muscles of the back; and the sum total of its immediate effect that described above.

The constitutional disturbances following these arrow-wounds, even when the injury is confined to bone or muscle, are liable to be out of all proportion to the apparent amount of damage done. There is almost always considerable febrile action, more or less complete anorexia and sleeplessness, and derangement of all the secretions. To these may be added great irritability and intolerance of a moderate degree of pain, much dejection of spirits, haggard and anxious countenance, etc. The tendency to despondence be-

comes frequently a prominent symptom to be combatted, and everything should be done to cheer the patient. Assuring him that things are "all right," is quite admissible, even though a dozen fragments be still in his body; for it will have an amazing effect in helping him to discharge them.

I would in conclusion offer a few simple rules for the treatment of this kind of injury:

1. Explore the wound thoroughly, even should much division of muscular tissue be thereby necessitated.

2. Extract the last fragment that can by any means be laid hold of, and cleanse the wound thoroughly.

3. Dress very lightly and openly, facilitating by every means the ready discharge of pus; watching for burrowing and abscesses, and evacuating them as soon as detected.

4. However serious the wound, make light of it to the patient.

5. Attend promptly and vigorously to constitutional symptoms, combatting them by the ordinary well-known means.

OPERATION FOR VESICO-VAGINAL FISTULA.

BY PROFESSOR JOSEPH PANCOAST, M. D.

Reported by Benjamin C. Snowden, M. D., of Huntingdon Valley, Pa.

The following is an account of one of the most successful surgical operations.

Mrs. A., a resident of Indiana, set. 26 years, was confined about the first of last October. The labor was protracted and difficult; the child was dead. Immediately after delivery, she was unable to retain her urine, but it was attributed to paralysis. About ten days after, she passed a fleshy substance about, two inches square; one side of which was incrusted with a white saline coating, which, she said, resembled the bottom of a tea-kettle, in which limestone water had been boiled. In speaking of it to her medical attendants, she told them that she thought it was a portion of her bladder, which was afterwards found to be the case.

About the first of January of the present year she came east, and was placed under my care by her husband, with directions for me to do whatever I thought was necessary in the case. After a careful examination, I was satisfied that the fistula was a very large one, involving about one and a quarter inches of the urethra, and extending back to the os uteri, being considerably larger than a silver dollar. As I was satisfied that without relief she was doomed to a life of

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constant misery, with perhaps insanity and a premature death, I recommended an operation. She consented, and I called in consultation Professor PANCOAST. The result of his examination confirming the diagnosis I had previously made, we stated to the patient that her only prospect was in an operation, and if it failed she would be no worse than before. About the middle of January, Dr. PANCOAST, in company with myself, assisted by Dr. WILLIAM H. PANCOAST, and Mr. CHARLES KING, student, proceeded to operate.

The patient was placed upon a mattress on a table, resting upon her knees and elbows, her abdomen being supported by pillows. The female catheter was introduced first, then the perineum speculum, which was supported by an assistant. Dr. P. then proceeded to remove all the smooth tissue from the sides of the fistula, so as to present a raw and bloody surface for union, which he did very skilfully, with the scissors and sharp pointed bistoury. After the edges were pared throughout the entire extent, great care being taken that not the smallest portion of mucous membrane should remain—the wire sutures were introduced—silver and iron alternately, to the number of seventeen—the edges of the fistula came together nicely, and the sutures were fastened by having the ends passed through shot. The button suture, or flat pieces of lead, with holes pierced in them, were used on some of the wires, in consequence of the softness of the flesh, as it was feared a small shot might be drawn through.

After the operation, which lasted about three and a half hours, the patient was placed in bed, and 15 drops of black-drop administered, which was repeated at intervals during the night. The catheter was kept in the urethra, and at the end of ten days—she having exhibited no unpleasant symptoms whatever—we removed all the sutures but three. In three or four days they were removed also. No unpleasant symptoms occurred, and very little medication was needed. At the end of three weeks the catheter was removed, and she rode out into the country some twelve miles, where she remained two weeks; since which time I consider her perfectly cured. She can retain her urine six hours, and discharge it when she chooses, having perfect control over the sphincter.

She has now left for her western home, a perfectly sound and exceedingly happy woman.

It might be well to state that she was not under the influence of anaesthetics, but was perfectly conscious during the entire operation. This is one case more to be added to the many

difficult and brilliant operations the modern surgeon is prepared successfully to perform; and although at first sight it might seem a hazardous undertaking, still by a skillful operator it may readily be done, and should in all cases of the kind be attempted; as it is the only means of relieving many an unfortunate woman from a life of indescribable pain and misery.

TREATMENT OF DIPHTHERIA.

By P. J. FARNSWORTH, M. D.,

of Clinton, Iowa.

Pathology, and pathological indications, mainly influence the intelligent treatment of disease, and it should be our aim to have this in view, and to draw sound conclusions from our observations, and the results of treatment. Even the lowest empiric has a theory in the application of remedies, and though often applied fancifully, they sometimes hit the mark. And though our conclusions are often wrong, yet we are to be distinguished from them, by our study and deeper insight into the reasons of things, and endeavors to find the truth. It is with this in view that I am led to offer some conclusions, and observations on diphtheria.

Diphtheria is now generally considered and treated as a constitutional disease, with peculiar local manifestations. It is denominated a toxico-hæmætic, or blood-poison, a zymotic disease, etc. From various observations I am led to differ from these conclusions, and to regard it, primarily, a *strictly local* disease. In common with some other diseases, it secondarily affects the constitution in a most powerful manner.

An adventitious growth springs up on some appropriate surface, most frequently on the mucous membrane of the throat, but often appearing elsewhere, as on an external abrasion, a blistered surface, the vulva of a woman, on a wound, and sometimes on an inflamed conjunctiva. Whichever it springs up, it adds new virulence and pain to what is already begun, no doubt generating a new poison, which, taken up by the system, produces powerful constitutional effects. The system may be already infused with a poison, and offer a more readily formed nidus for its growth, as in scarlet fever, or measles, and thus have to contend with a double portion of morbid action, either of which is enough to overcome struggling nature.

The character of the membrane is one allied to a vegetation of the lower forms, as in the *conferva*, denominated by Dr. LAYCOCK, if I mistake not, one of the forms of the *oidium albicans*, developed by sporules, as other plants of that

character are. This may account for the epidemic and apparent contagious nature of the disease. I might adduce many arguments in support of this position, but the most of them will strike any intelligent observer of the disease, viewed in the light I have placed it, and need not be drawn out here.

The main argument that I wish to produce here is one drawn from the successful treatment of the disease.

About two years ago I called the attention of the profession to the local use of tincture of iron, and of the persulphate of iron, in this disease, based on some experiments on diphtheritic membrane, covering abrasions of the cuticle, and also by its use in cases occurring in the throat. Since then I have confirmed my previous views, by further trial of the preparations, in severe forms of the disease, and have also received several very flattering notices from the press, and in private letters from others, whose attention was thus directed to its use. I am not aware of having seen it before mentioned, though presume I have, as nearly every article of the *materia medica* has been recommended.

In whatever light the disease is viewed, local treatment is largely relied on. Acid hydrochlor. dilut., argent. nit., zinci sulph., creasote, chlorate of potash, and many others, among which is permanganate of potash, which is highly recommended, but which I have never tried. Chlorate of potash has been long and highly vaunted, but in my experience has been comparatively worthless. This, conjoined with constitutional or supporting treatment—for the depressing nature of the disease is the first one to be observed—is now settled on as the recognized and most approved manner of dealing with it.

In the view I take of it the treatment is not so much changed as in the order of application.

I have settled upon the use of the solution of persulphate of iron as almost a specific, applied locally, and if applied early, or if in a situation where application can be made (which is unfortunately not the case sometimes), will alone arrest the disease.

The iron seems to penetrate or dissolve the membrane, and prevent its growth. It does it in the most painless manner, and if there is anything left over goes to strengthen the system, as iron does. In several instances a single application to a *velum* and tonsils covered thickly with diphtheritic membrane has effected a cure. It is equally efficacious in aphthous stomatitis, and in any forms of cankered sore throat, or mouth. A mild solution will at once arrest thrush. I have

a case recorded in my note-book, of cancrum oris, cured apparently by the use of the persulphate of iron.

Glycerine is an excellent vehicle in which to suspend the remedy; and where there is much difficulty in applying the probang, a gargle made as follows answers every purpose:

R. Sol. ferri per. sulph., f. 3ss.
Glycerine, f. 3ij. M.

S. A teaspoonful every three hours allowed to run slowly down the throat.

In follicular inflammation of the throat, or chronic ulceration, and enlarged tonsils, I have found the following of great benefit:

R. Glycerine, f. 3ij.
Sol. ferri per. sulph., gtt. xx. M.

S. Use three times a day.

In summing up the matter, it appears that diphtheria is a powerful local disease, creating intense pain, and generating a poison taken up by the absorbents. That if treated at first locally, it may be arrested, but that after a time the constitution must be sustained. The nature of the membrane is such that it may be destroyed, and a return prevented by the application of some solvent, the best known of which is a preparation of iron.

It occurs to me here that the application of the persulphate of iron to the membrane of croup would be found useful. I have had no opportunity of trying it, but believe it will remove such membrane, and will make such trial when a case occurs.

I remember here the substance of a paper printed in the *Boston Medical Journal* four or five years ago, which was a clergyman's description of the malignant "throat distemper" prevailing in Massachusetts a hundred years ago.

It conclusively showed that diphtheria is an old form of disease, and was severe then, and amenable to certain remedies, the most celebrated of which was the following:

A certain quantity of copperas, (sulphate of iron), was calcined and applied to the membrane, and some herb infused in hard cider, was used at the same time, internally.

Diphtheria may be easily controlled, and cured, if within reach, and measures taken early. It sometimes attacks the throat, and down the bronchial tubes, and into the nares. If the first onset is so extensive that remedies cannot reach it, the constitution has not power, in any case that I have seen, to throw it off.

A certain proportion of cases will necessarily be fatal, under any treatment, but many cases, now fatal, may be saved, if rightly viewed, and properly managed.

NEW METHOD OF LIGATING THE PEDICLE OF AN OVARIAN CYST.

BY P. W. ELLSWORTH, M. D.,

Of Hartford, Conn.

Those who have had occasion to investigate the subject, are aware of the serious objections existing to all the methods now in vogue, of suspending or preventing haemorrhage from the pedicle. The most usual or recently proposed are ligation en masse and attachment of the pedicle to the wound, after ligation of the whole end, or returning to the abdomen with the ligature cut short, actual cautery, and écraseur. It seems singular that the established rule of surgery, of tying the vessels themselves, has not been followed here. This is probably for fear of haemorrhage, or for the sake of expedition. SIMPSON indeed intimates that on a suitable occasion he shall try this, using wire and leaving the ligatures in the abdomen; and a writer, by name of WILSON, in the *Med.-Chir. Rev.*, proposes ligations to the individual vessels, but it does not appear that either of these persons have acted on their suggestion. I have been able to find but one instance in which it is reported that this course was actually taken, and that was the first case in New England, or perhaps in the United States, by Prof. NATHAN SMITH, then of New Hampshire. It is said that on cutting the pedicle, he "tied two small vessels." The case terminated well. All risk in tying would be avoided by first applying the clamp, by way of tourniquet; then on cutting the pedicle, the open vessels could be readily and securely tied, notwithstanding the glairy nature of the fluid with which the stump is bathed.

SIMPSON has recently proposed securing the vessels by acupressure, by passing a pin transversely across them, and tying a wire over this, covering the end of the pin by a hood.

Permit me to propose the following plan, which would possess many great advantages. The position of the arteries is to be first detected by the finger; if the cord is broad and flat, so much the better. A needle, armed with thread or wire, is thrust through the pedicle, close as possible to the artery, should a vein be close to it, it is of no consequence; the needle is to be returned on the opposite side, and the thread tied securely around the vessel. This thread or wire may be cut short or left hanging from the abdominal wound. Every large artery is to be thus treated, and even veins, if bleeding after division. However many there are, there will be plenty of pedicle left untied, to preserve the portion between the ligatures and extremity alive. This

would take a little more time than ligature en masse, but its advantages will more than pay, as the present difficulties will be mainly removed. The clamp might be applied before the ligatures, then on cutting the pedicle across, the open vessels will permit a more easy detection of the exact location of these. The following are the advantages:

1st. The end of the pedicle will not slough, and as this is sometimes quite large, it dangerously complicates the case.

2d. The ligature, being very small and secured to a small portion, will speedily free itself, and be discharged, if hanging from the wound. It will be less irritating than the large cord now in use and necessary. Moreover, if wire is employed, it may be left with comparative impunity. This wire, if left on the outer end of the pedicle, will be apt to fall into the pelvis, but if fastened in the living pedicle, it will there safely imbed, and the intestines will be safe.

3d. Slipping is impossible, because thrust through the pedicle.

4th. Bleeding, as in PARKMAN's case in Massachusetts' General Hospital, from shrinking of the large pedicle after ligation, would be impossible, as a very small part of the pedicle would be embraced in each ligature.

5th. No large suppurating surface will be left on detachment of the ligatures.

6th. The distress caused by the ligature en masse will be entirely avoided. It is not improbable that much of the nausea and prostration usually following ovariotomy, may be owing to the common method of strangulation, as we know the sympathies of the abdominal viscera, severe symptoms even following a ligature on the omentum, a body apparently not intimately connected with the intestines.

7th. The wound can be better closed and healed throughout by the first intention.

I have not been fortunate enough to be able to carry my ideas into effect, not having had an opportunity, since they came to mind, of performing the operation. I hope some one more frequently treating these cases will take the subject into consideration. The long round pedicle is not so favorable for this treatment as the short and broad, but these can be more readily cut long and secured at the edge of the wound, externally.

Dr. JOSEPH G. HALL, aged 77 years, died in Hernando, Miss., recently. Dr. HALL was one among the oldest citizens of Hernando, having resided there some thirty years.

Hospital Reports.

PENNSYLVANIA HOSPITAL, }
March 24th, 1866. }

Cases Selected from the

MEDICAL CLINIC OF DR. DA COSTA.

Reported by Dr. Napheys.

Case of Eczema.

Thomas C., a sailor, at. 22, was brought before the class. He was in good health before being attacked with this disease, which he now has on right leg. It began two months ago, he said, with little pimples filled with water. The part has itched very little, and only in warm weather, to which he was exposed while at Charleston. When kept covered, with a great deal of clothing, the affected skin burns, and the direct contact of salt water produces considerable pain, but the atmosphere at sea does not hurt it. The tongue is slightly covered with whitish coat. The appetite of the patient is good, and bowels regular. Has never been jaundiced. Has had a little heart-burn, during the passage, for four days, just before this eruption made its appearance.

This case was pronounced to be one of eczema. The facts elicited were purposely inquired into, in order that something might be learned as to its local origin, and to what extent there were any constitutional symptoms mixed up with the disorder. In reference to its local origin, the first appears, what may fairly be assumed to be little vesicles, these rupture, and from their contents drying, the crusts are produced. The patient presents a typical illustration of one of the forms, and a very common one, of eczema. This same appearance is sometimes seen on the heads of children, constituting there, *crusta lactea*. The eczematous appearance cannot now, in this case, be readily detected, that is, vesicles cannot be found at any point, but their dried contents are seen forming crusts. In some respects this variety of eczema forms a transition between eczema and impetigo; hence, it is sometimes called the impetiginous form of eczema. But it is very doubtful if it is worth while to make any such distinction. It is an eczema with crusts, which consist partly of the dried contents of the vesicles, and some pus globules. Attention was particularly called to the great reddening of the skin, showing that there is something more here than the mere vesicular affection, which is supposed to be characteristic of eczema. There is thickening of the derm, and in very many of these cases itching and burning, both of which, however, in this instance, are to a great extent absent. In old cases of eczema, there may be at times nothing but the appearance seen here, the skin not presenting any distinct vesicular look. It is very difficult, indeed, to classify such. It would be very hard to prove to any one that they are eczema, and yet we know that cases commencing as eczema gradually degenerate into that ill-described affection, which consists in thickening of the derm, with disorder of the epi-

dermis, and in which the distinctive vesicular nature, the running weeping surface is absent.

There are some of the varieties of eczema all traceable to the same general cause, and that, so far as the local trouble is concerned, consists primarily in an affection of the derm, a sub-acute inflammation, with the fluid which is exuded, as a rule, around the glands of the skin, where it forms, and where the weeping vesicles are first detected. In every case of eczema, it is of importance to ascertain if there be any constitutional phenomena present. Here they are very slight. Beyond a coating of the tongue, possibly some gastric derangement, there is nothing which points to any constitutional irritation. Very generally there is found marked digestive disturbance, and, in truth, as much attention has to be paid to the constitutional phenomena, as to the local disease. In this case, as it is only of two months standing, and not accompanied by any general disorder of the system, save the slight digestive trouble mentioned, merely cream of tartar was ordered internally, two drachms daily, to act very gently as a laxative, and partly as a diuretic. Locally, as the disease is tolerably acute, the leg will be poulticed, to get off the scabs, with bread and milk, mixed with olive oil, or a slippery-elm poultice. After having done this, as an alterative to the skin the plan of treatment, which has a very strong advocate in Prof. BENNET, will be pursued. It consists in keeping the part, by day and by night, so far as practicable, bathed in a weak alkaline solution of one half a drachm of carbonate of soda, or potassa, to a pint of water. This can be readily done by changing the cloths frequently, and surrounding them with oil-silk. This method of treatment is often found very efficient, especially in the more recent cases.

WILLS OPHTHALMIC HOSPITAL, }
February 6th, 1866. }

BY T. G. MORTON, M. D., SURGEON.

[Reported by C. R. Morgan.]

Traumatic Iritis, with Hypopygium.

W. L. at. 23, was struck upon the cornea by a piece of steel. A week after the accident he applied for relief. There was intense pain in and around the ball of the eye, and back of the head; the iris was discolored, irregularly contracted, and pupil small; the cornea dull, and, at the point of injury, a small excavated ulcer existed; in the anterior chamber we find a collection of puro-lymph, constituting what is known as hypopygium, which is secreted from the inner corneal surface; we prove the existence of this fluid in the anterior chamber by changing the position of the patient's head, when we see that the fluid gravitates toward the dependent side.

Treatment. As a wash, the solution of atropia should be used to dilate the sluggish and inflamed iris, and to prevent its attachment to the lens; it also acts as an opiate for the eye, almost immediately giving relief to the pain. Internally I generally use a mixture of turpentine in mucilage, with either acetate or iodide of potassa; in simple iritis the former, and in specific the

latter;—and should the patient be in a low condition, milk punch, with iron and quinine, can also be administered.

Syphilitic Iritis.

Case shown; man, 29, choree contracted eight months ago; secondary symptoms 3 months afterward; iritis developed four weeks since; vision very much impaired,—pupils contracted on admission, and changed in color. Has had the atropia wash (grs. ij. to f. 3j.) used twice a day in each eye; the pupil of the right has responded freely and regularly, but in the left, where the disease has been of longer duration, the dilatation progressed more slowly—the turpentine mixture with iodide of potassa is rapidly effecting a cure. We must guard against relapses which often occur.

Traumatic Cataract Wound, and Prolapse of the Iris—Extraction.

This patient was admitted a week ago, suffering from the effects of an injury two days previously, while cutting ice; the hook used in drawing off the cakes, slipped and struck him on the side of the temple and eye, causing a rupture of the cornea at the sclerotic junction, with laceration and hernia of the iris. When admitted, the pupil was irregular, a bulging of the iris through the wound to some extent, and the lens in a milky condition, swollen and pressing against the iris; the pain intense; extraction of the lens was immediately effected, by making a small incision on the outer side of the cornea, and scooping into the soft and broken lens; since which time the patient has had no pain, and the pupil is assuming a more natural appearance, and vision improving daily. We need never be afraid of extracting a traumatic cataract, no matter how much inflammation exists, provided the latter is due to pressure of the swollen lens upon the iris, or a dislocation partial or complete into the anterior chamber; the removal of the lens in such a case gives immediate relief. By the aid of a double convex glass, supplying the place of the lost lens, we will be able to improve his vision. Atropia has been constantly dropped into the eye, which is the best local application in such cases.

Double Cataracts, with Amaurosis from prolonged Lactation.

The patient, ast. 30, first observed her sight failing her about eight months ago. She had until that time been nursing twins, which were vigorous children, and received no nourishment, except from the mother, for eighteen months. Not only her eyes suffered, but her entire system was much prostrated; vision at present is confined to the light and shadows; the pupils are sluggish, and cataracts well formed and soft are developed. Great impairment of the retina is also to be expected here, and our aim has been to improve the general health, which is now much better than when she was admitted. Iron, strychnia and stimulants, have been ordered for her; and to-day I shall extract the lens from the right eye by the lower section, making a small incision of the cornea, prolapse the iris with a blunt hook, cut it off, and remove the cataract

with the scoop I here show you, (Fig. 1), which is passed through the corneal wound behind the lens, which readily comes away on slight traction. This instrument I devised some years ago, and find it answers the purpose better than any

FIG. 1.



other. In this operation we have a small incision, a cut, instead of a bruised iris; and little or no danger from loss of vitreous, which so often results from the ordinary extraction operation, where the lens is forced out by pressure upon the globe. The operation was performed. The after-treatment consists in placing upon the eye a soft pad of white flannel, of several thicknesses, covered with a little charpie, and gently compressed against the eye with a flannel roller. A few hours after the operation, some atropia solution is dropped into the eye.

— Patient exhibited to class; union of flap perfect; no pain since the operation. Vision improving, with the improved general health, and absence of the cataract.

Double Cataracts Hereditary—Double Convergent Strabismus, with Pterygium.

J. B., ast. 35, had perfect vision until 12 months ago, when his sight began to fail him. He has always had double convergent strabismus, which is seldom found with normal vision. His father, two brothers, and two sisters, have cataracts at the present time. A third brother was under my care some four years ago, with double cataracts, and whose case I successfully operated upon by extraction, making the upper section. In this case the pupils act well, and vision is improved by the dilatation, showing a healthy state of the nerve, the periphery of the lens being most dense at the centre. The association of cataracts with double strabismus and pterygium, is very unusual and interesting. The lower section of the cornea was made; the iris prolapsed and cut off, and the scoop passed behind the lens, which was readily extracted. A compress made with flannel and charpie, was placed upon the eye, and held in position by a flannel bandage.

Feb. —. Union complete; vision good; no pain. Some capsule remaining at upper and inner part of the pupil, will be absorbed in time.

Feb. —. Division of internal recti of each eye, with correction of the deformity. A pterygium exists at the inner side of the right eye, which can be removed at a future day. Discharged cured.

Plastic Operation to Restore the Normal Condition of the Palpebral Fissure.

The patient, a soldier, was wounded by a musket ball striking the external angular process of the right eye, and passing directly across to the opposite side, destroyed both globes; on emerging at the external angle of the left eye, the ball was deflected downward, and carried away a portion of the malar bone; the parts on healing have been drawn downward, and the external commissure is attached to the bone below, so as

to give a very oblique direction to the lids; the tears are constantly flowing over the face, much to the patient's annoyance, and he is unable to have an artificial eye inserted. The integument was dissected from the bone, and a flap from the temple turned in to fill up the gap.

Feb. —. The parts have healed up kindly, and the natural appearance of the palpebral fissure is observed; the tears no longer flow over the face, and we have already inserted an artificial eye.

EDITORIAL DEPARTMENT.

Periscope.

Two Cases of Croup Successfully Treated by Fumigations of Sulphuric Ether.

The Montreal "Gazette Médicale" publishes from *Abbeille Médicale* the report of two cases of diphtheritic angina, or false-membranous croup, treated with success by inhalations of ether, under charge of Dr. M. BESSON.

The first patient was a girl, six years of age, who presented the following symptoms: Swelling of the sub-maxillary glands, puffed face, pulse slightly accelerated, pain in the throat, difficulty of swallowing. Mucous membrane of fauces engorged and reddened, tonsils strongly tumefied, and presenting several patches of the pellicular exudation which characterizes diphtheritic angina. Voice gone; cough dry, choking, and croupy. Respiration short, accelerated, and labored. The patient was at first treated in the usual manner by vomits of tartar emetic and ipecacuanha, etc., chlorate of potassa, mercurial frictions around the neck—with no effect, however, except the expulsion of some membranous shreds and patches. As a dernier resort, Dr. B. thinking it unadvisable to resort to tracheotomy, inhalations of ether were employed. The effect was an attack of suffocation, accompanied by a violent respiratory struggle, lasting nearly a minute, during which a false membrane, over 6 centimetres in length, and 3 millimetres in thickness, very dense, like a piece of parchment, was expelled. The effects of this paroxysm gradually subsided and the patient soon went into a calm sleep. After about eight hours, the symptoms recurred, and again recourse was had to the ether fumigations, resulting in further expulsion of false-membranous exudation. Calm and sleep again supervened, the croupy symptoms yielded, and in a few days complete recovery had taken place.

The second patient was a little boy, five years of age, who was attacked with diphtheritic angina. Vomits of sulphate of copper, etc., had been used, followed by the expulsion of some false membrane, but still the symptoms became aggravated. There was complete aphonia, tonsils tumefied, and covered with whitish patches, cough insonorous and choking, successive dyspnoea, convulsive movements of the expiratory muscles, quick, sibilant inspiration, face congested, eyes

injected, jugulars distended, extreme anxiety, convulsive agitation, and intense fever. In short, the patient was in the midst of these terrible paroxysms, which have hardly any remission, and which announce that the final symptoms of asphyxia are near at hand. In this condition the patient was made to inhale, in the space of several minutes, about five drachms of vaporized ether, and soon afterwards, in the midst of the violent efforts of a veritable strangulation, he expelled, enveloped in thready mucosities, a false membrane, seven to eight centimetres long, two centimetres in its greatest circumference, and very dense. In half an hour the symptoms of amelioration had become so decided, that the disease was thought to be broken, and during the forepart of the night the little patient rested quietly. Towards midnight the dyspnoea, and the paroxysms, became again urgent and violent, so that the patient himself cried for the use of the ether. This second fumigation produced the expulsion of several pieces of false membrane, rolled upon themselves, but smaller than the previous one. Again, subsidence of the croupy symptoms, and their occasional re-occurrence during the next two days, when the ether was again applied. The patient finally recovered.

The evaporation of the ether in these cases was accomplished by very simple means,—placing a bottle containing the ether, and terminating in an extemporized tube, into a bowl of water of 40° Cent.; the ether fumes were thus carried from the tube with the air of inspiration into the air passages.

Reviews and Book Notices.

The Physiology of Man; Designed to represent the Existing State of Physiological Science, as Applied to the Functions of the Human Body. By AUSTIN FLINT, Jr., M. D., Professor of Physiology and Microscopy in the Bellevue Hospital Medical College, etc. Introduction; The Blood; Circulation; Respiration. New York: D. Appleton & Co. 1866. 8vo. Pp. 502.

Prof. A. FLINT, Jr., is probably best known outside of his immediate field of labor, through his investigations into the part performed by *cholesterine* in the economy, and its excretion by the liver. The results of these inquiries, although hardly yet adopted so as to make part of the "existing state of physiological science," are very interesting, and, if confirmed by other competent observers, will be enough to establish a reputation. The intention and nature of the volume before us, may be best stated in the author's own words:

"The plan of publication of the present work is one which is novel in this country, but which has been adopted abroad, particularly in France,

in almost all elaborate treatises on physiology. It is to be issued in separate parts, each, however, forming a distinct treatise devoted to natural subdivisions of the subject. The remaining volumes, three in number, will be issued yearly, until the work is finished, and will be severally complete in themselves." Preface, p. 8.

Such a *serial* issue of a physiological work has been, as above intimated, exemplified in the writings of LONGET, MILNE EDWARDS, BERNARD, and others, with the advantage of the more thorough and deliberate treatment of each subdivision of the subject. The works of these authors are either exhaustive treatises, or records of original investigations. Dr. FLINT's book is not simply either of these, but of an intermediate character.

It is, thus, not well adapted to the young student, who wants a compact, or, at least, a complete text-book, ready for all his use. It cannot be a *primary* book in physiology. But it will interest, and may be of use to the teacher and scientific student of the subject.

The work is well and carefully written; *not* exhaustively, but with many citations, especially from recent French authors, and a good digest of current physiology. But we find one serious fault in it: a *dogmatism* upon one or two points, which, in an author's first extensive work, appears to us presumptuous.

Thus, from page 293 to page 300, consideration is given to the causes of the capillary circulation. In these pages, the view is propounded, that the impulse of the heart, aided by the elastic rebound of the arteries, suffices to account for all the capillary *movement*; while the varying tonic contraction of the arterioles explains all capillary *variations*. The references made to authors upon these subjects are, to POISEUILLE, 1835; DUNGLISON, 1851; MAGENDIE, 1836; BICHAT, 1800; HOUSTRON and HOLLAND, 1836; and COOPER and LALLEMAND, 1844; none of them recent, certainly; and only one American. But no word of allusion to the name or theory of Prof. J. W. DRAPER,* who will be remembered, we venture to think, in connection with the *history* of capillary physiology at least, (and, we believe, its doctrine also,) quite as long as Dr. FLINT and most others are likely to be.

An American work on physiology, treating of the capillary circulation, without naming DRAPER! Could this happen, too, in New York? We are almost led to change the question, so as

to say, could it happen anywhere else than in New York? Certainly, however, it ought to happen nowhere. Even if the author were certainly and obviously right in his own view, which we do not grant; or sustained by all other authorities on the subject, which is not the case; still it would be a case of scientific neglect, as we consider it to be, also, of literary courtesy and injustice.

Omitting the mention of one or two other, though less glaring, instances of dogmatism, upon the "present state of physiology,"—a very good word indeed must be said of the admirable manner in which the book is issued by APPLETION & CO. The paper is tinted, and exactly the *right* tint, for beauty and for ease to the eyes in reading it. This is a point to which ophthalmologists have lately directed attention. They assert that certain shades of yellow or buff on book paper, lessen very much the fatigue of the optic nerve in looking steadily upon it. Some attempts to meet this idea, however, are not successful. The tint of AITKEN'S Practice, for example, declared by its author to have been selected for that very object, is uncommonly trying to our eyes.

The whole style of getting up this volume is superior. We do not know of a more *elegant* book, in its interior, in any American issue at least, in the range of the medical sciences.

Biographical Sketches of Distinguished Living New York Surgeons. By SAMUEL W. FRANCIS, A. M., M. D., Fellow of the New York Academy of Medicine. Reprinted from the Philadelphia MEDICAL and SURGICAL REPORTER. New York: Published by John Bradburn. 1866. 12mo., pp. 220. Price \$1.50.

The readers of the REPORTER are most of them already acquainted with these sketches. They are certainly interesting. As a matter of taste, some may question the desirableness of such contemporary biography. The precept never to call any man fortunate before the end of his life, is as old as Croesus. To call no man great before he has either died or become President, might still suit our times. Still, if done, we desire such a task to be done agreeably.

These cannot be called *critical* biographies. Nothing but eulogy seems to have been thought of in their composition. Many faults of style might also be adverted to. But, as they claim only to be sketches, and appear to be carefully made upon authentic information, they no doubt deserve, and will have many professional readers.

For sale at this Office, and at the Book stores.

* Prof. Draper's Physiology was published in 1856; but his original inquiries into the circulation of Plants and Animals were made known many years before.

Medical and Surgical Reporter.

PHILADELPHIA, APRIL 28, 1866.

THE MEDICAL AND SURGICAL RECORDS OF THE WAR.

A telegram from Washington to a daily journal says:

"The Joint Committee on Printing to-day had up the proposition of the Surgeon-General to print the medical history of the war. It will make a very large volume, and is to be filled with cuts and engravings. It will be very costly, and would, if carried out, exceed in value anything of the kind ever published in Europe; but the Committee are not disposed to expend such a large sum of money as will be needed."

We do hope that the Committee will realize the great importance of the subject under consideration, and that Congress will act in the matter with a wise liberality. The war through which we have just passed has been one of such unexampled magnitude as to afford unrivalled opportunities for the study of military medicine and surgery. The medical officers of our armies have not been slow in availing themselves of the opportunities presented to them, and under the judicious direction of the Surgeon-General and his assistants, a mass of material has been obtained, which is described as "simply enormous."

This immense collection of facts, well-digested statistics, history of interesting cases, and reports of important and novel operations, is accompanied by specimens, both wet and dry, elegantly mounted and preserved, and by the most artistic photographs and drawings, the preparation of which has been a tremendous work, requiring patience, perseverance, and above all, a love of science, of no ordinary character. Placed, as this material has been, in the hands of talented and accomplished officers, it cannot fail to be presented in a form and manner worthy of so great a work, and of so great a nation. Indeed, we see assurance of this fact already in the "Circular No. 6," from the Surgeon-General's office, recently reviewed at length in our columns.

The publication of the contemplated volume would serve to inaugurate a new era in military medicine and surgery, and to place these branches of science at a point that we never expected to see them attain in this century, at least. It would show to the world, as can be done in no other way so forcibly, the grandeur and immensity of our war, and the wonderful task devolving upon our army medical officers and the skill and industry which they brought to the work.

The experience and skill gained by our surgeons should not be allowed to die with them,

but in the interest of a common humanity, should be given to the world. The proposed volume, then, is not only of national, but of world-wide importance, and its appearance is eagerly watched for, not only in America, but also by the whole scientific world. Congress should act in the matter as becomes the dignity of a powerful and enlightened people. Economy in the public expenditures is to be commended, but it would be but a mistaken economy that would dole out with stinting hand the money for this great national work. As Americans, proud of the profession of our country; and in the interests of science and humanity, we trust that the Committee will bring to the consideration of this subject a comprehensive and liberal judgment, and that our national legislature will do honor to itself and credit to the country, by publishing this national work in a style and shape creditable to the many scientific and painstaking officers who have collected the material for it, and worthy of the subject and the country.

MEDICAL AND SURGICAL HISTORY OF THE LATE WAR.*

VIII.

Diarrhoea, etc.; Pathology.

The subnitrate of bismuth is strongly recommended as a useful remedy in the treatment of this class of diseases, both in the acute and chronic form, though the extravagant expectations which were at first entertained with regard to it by some were not realized. Diet and climate form important elements in the treatment. Diet of fresh meat, and broth made from it, eggs, milk, oysters, with an abundance of fresh vegetables and the removal of patients to a northern non-malarial locality, were generally accompanied by the best results.

The series of specimens in the Museum, illustrative of diarrhoea and dysentery, consists of over two hundred specimens, grouped as follows:

The first group embraces the examples of follicular ulceration of the colon. The specimens present all the transition forms of simple enlargement of the solitary follicles of the colon, the rupture of the same, and the formation of punched-out ulcers of moderate size. The colon is usually more or less thickened, the thickening in some cases amounting to a quarter of an inch. The ulcers are usually rounded or oval, extending nearly or quite to the muscular coat, and looking much as if they had been cut out with a punch; when received fresh at the Museum, the

* Extracts from Circular No. 6. Dr. OTIS' and WOODWARD'S Reports.

appearances varied with the stage of the process. In the few cases in which the solitary follicles were simply enlarged, without ulceration, the intestine was seldom thickened. It was often normal in color; sometimes, however, slate or ash-colored; sometimes it presented patches of congestion. The enlarged solitary follicles were often the seat of pigment deposits; sometimes also an areola of pigment deposited in and among the glands of LIEBERKÜHN, surrounded the enlarged and blackened solitary follicles. These patients had generally died of some other disease, as of camp-fever, supervening upon the diarrhoea, with lesions of the small intestines—of gun-shot wounds, etc. In the more serious cases the color was more or less thickened, and presented punched-out ulcers which had originated in the solitary follicles. In these cases the colon was seldom normal in color. Sometimes it was red, reddish-brown, or reddish-black; at other times greenish, slate, or ash-colored; at others, again, unnaturally pale. Its texture, when cut into, was sometimes tough and lardaceous; sometimes it was softened. The ulcers usually presented a grayish or yellowish-gray base. They were sometimes filled with mucus, at other times contained pus. In the majority of the cases of this class, the small intestines were not involved, unless camp-fever had existed as a complication.

The second group of cases was characterized by greater extension of the follicular ulceration, until, in extreme instances, the greater part of the mucous membrane of the colon is destroyed by the vast erosions thus produced. The follicular ulcers usually extend by burrowing in the submucous connective tissue; in this way, in some of the specimens, several of these ulcers communicate with each other in the submucous tissue, though still retaining distinct orifices. The mucous layer containing the glands of LIEBERKÜHN, undermined by the extension of the ulcer, not unfrequently hangs in shreds like a fringe from its edge; the undermined portion being occasionally destroyed by ulceration, but more frequently perishing by sloughing. In the recent specimens, the mucous membrane is generally of a dark-red, brownish, greenish-brown, or slate color, the ulcers presenting yellowish-brown or yellowish bases, often with blackish or brown sloughs adhering to their surface or edges.

In the third group, in addition to the appearances of the former, the gut was found more or less coated with a yellowish or greenish-yellow pseudo-membranous layer, like that observed in the air-passages in diphtheria. This condition is generally the result of an acute dysenteric pro-

cess supervening upon a previous diarrhoea of long-standing. When fresh, the appearances of the gut are masked by the plastered layer of pseudo membrane which coats its surface.

The fourth group includes the cases in which the small intestine is enlarged as well as the large, generally in consequence of the complication with camp-fever.

The fifth group embraces tubercular ulceration of the bowels. The ulcerations are more marked in the small intestine than in the large, but both are usually affected. The patients have tubercles in the lungs; cheesy transformation of the mesenteric glands; at times other tubercular lesions.

Small-Pox, Measles, etc.

From an early period of the war, vaccination was strenuously urged in the army, and that these efforts were to a great extent successful, was shown by the comparatively small number of cases reported; the total reported during the two first years being 4132 cases, with 1544 deaths, or one death to about every three (2.67) cases.

Measles occurred chiefly in regiments recently raised; 21,676 cases and 551 deaths were reported during the first year of the war, 16,345 cases and 1313 deaths during the second. The disease resembled ordinary measles in adults, except when aggravated by the effects of crowd-poisoning or other depressing influences. The direct mortality was not great, being only one death to every twenty cases, but tedious catarrh, pneumonia, and pleuro-pneumonia, were frequent sequelæ, and a part of the mortality from these affections was due indirectly to measles.

Epidemic Mumps also prevailed extensively—11,216 cases with 9 deaths during the first year, 13,429 cases and 30 deaths during the second. The inflammation of the gland seldom terminated in abscess, except in those cases which occurred as complications of camp-fever. Metastasis to the testicle was not unfrequent. The disease appeared to be spread by contagion, affecting almost exclusively those who had never previously suffered.

Inflammatory Diseases of the Respiratory Organs.

These diseases, of course, occurred in the greatest number during winter. The whole number of the cases of this group reported during the first year of the war was 143,991 cases, and 2400 deaths; during the second year, 160,263 cases, and 5690 deaths, a total of 304,254 cases, and 8090 deaths for the two years. The main diseases of the group were catarrh 83,837 cases, epidemic catarrh 11,314 cases, acute bronchitis 26,201

cases, pneumonia 11,061 cases during the first year; and epidemic catarrh 63,202 cases, acute bronchitis 50,799, pneumonia 20,466, during the second year. Of the 31,527 cases of pneumonia during the two years, 7091 died, the whole number of deaths from this class of diseases being 8090.

Venereal Disease.

Of syphilis, there were 22,792 cases, and 39 deaths during the two years; of gonorrhœa and its sequelæ, 40,473 cases, and 12 deaths, being 76 cases per 1000 of strength for the two years. The ratio of venereal to the total amount of disease was one case of venereal to every 35 taken sick during the first year; one to every 41 taken sick during the second. These figures show a comparative exemption of our troops from these loathsome affections. In the English army, in 1859, there were 422 admissions to hospital for venereal among every 1000 men serving in the United Kingdom; in 1860, 369 per 1000; in 1861, 354, and in 1862, 330.

Notes and Comments.

The American Medical Association.

We are happy to be able to announce that arrangements have been made with the Baltimore and Ohio Railroad, and the Pennsylvania Railroad, and it is expected they will be made with other lines, to issue commutation tickets to delegates to the American Medical Association at its approaching meeting at Baltimore. These tickets will be supplied by the Permanent Secretary, Dr. ATKINSON, at the meeting.

Medical Temperance Society.

We would suggest that at the meeting of the American Medical Association at Baltimore, an American Medical Temperance Society be organized, and that its members establish branch societies in all sections of the country. Our profession see enough of the evils produced by intemperance, to throw their influence in the scale of total abstinence from all that intoxicates, as a beverage.

New Orleans School of Medicine.

The New Orleans School of Medicine held its commencement on the 16th ult., on which occasion the degree of Doctor of Medicine was conferred on twenty-nine graduates. The Dean of the Faculty, Dr. FENNER, addressed the graduates, after which and the conferring of the degrees, the valedictory address was delivered by Dr. I. L. CRAWFORD, Professor of Chemistry.

Medical Society of the State of Pennsylvania.

Owing to the difficulty of securing adequate accommodations in the town of Kingston, selected for the next annual meeting of the Medical Society of the State of Pennsylvania, and in accordance with the wishes and request of the Luzerne County Medical Society, the meeting of the State Society will be held, on Wednesday, the 13th day of June next, at Wilkesbarre, the county seat of Luzerne county, and only one mile distant from Kingston.

Delegates, upon arriving at Wilkesbarre, are requested to report immediately at the office of the Wyoming Valley Hotel, where the Committee of Reception will be in attendance.

Efforts are making to secure commutation tickets over the various railroads leading from different points in the State to Wilkesbarre.

By order of the Committee of Arrangement.

Medical Journals to be Revived.

We have received Prospectives of the *Southern Medical and Surgical Journal*, Augusta, Georgia, and of the *Nashville Journal of Medicine and Surgery*, which are to be revived from the first of July next. The former will be edited by Dr. JOSEPH JONES, Professor of Medical Chemistry in the Medical College of Georgia, and will be issued once in two months, each number containing 176 pages, at \$5 per annum. The latter journal will be issued monthly, each issue containing 80 pages, also at \$5 per annum. Dr. W. K. BOWLING will be the editor. In past times, both journals named were regarded as among our best exchanges, and we heartily welcome them back to a field which, by the way, is being very thoroughly occupied, and in which the earnest, devoted and persevering laborer will be the winner. May they both reach the goal—*after us!*

Littell's Living Age.

The *Living Age* has long been known as one of our best literary magazines. It is published weekly in Boston, by LITTELL, SON & CO., at \$8 a year. This work is chiefly made up of choice selections from foreign magazine literature, and is a well edited magazine, evincing taste and good sense in the selections. Those who wish to get the cream of foreign magazine literature at moderate expense, should subscribe to the *Living Age*.

Fracture Apparatus.

The *Scientific American* of April 21st, contains five drs. and a description of a fracture bed and apparatus for the reduction and retention of

fractures, the invention of Dr. M. M. LATTA, of Goshen, Indiana. It is a very ingenious contrivance, and may be found very useful, particularly in public institutions.

Correspondence.

DOMESTIC.

Lime Inhalations in Diphtheria.

EDITOR MEDICAL AND SURGICAL REPORTER:

At the suggestion of our Post Surgeon, Dr. Wm. C. PETERS, Asst. Surg. U. S. A., I send you the following summary of a case of diphtheria, treated by the lime inhalations; a remedy to which my attention was first called by a communication from the pen of Dr. A. GEIGER, of Dayton, Ohio, and published in your valuable journal for March 24th, 1866.

The patient, William W. McKenney, a child of six years, had complained of his throat, Thursday morning, April 12th, on rising. I saw him about 10 o'clock, A. M. The glands at the angle of the jaw upon the left side were much swollen, and the left tonsil much inflamed. A spot of false membrane, of a whitish color, and about three lines in diameter, was discovered upon it. There was but slight constitutional disturbance. A cathartic of calomel and rhubarb, to be followed by sal. rochelle, was administered, and the tonsil touched with a solution of nitrate of silver. The patient was also directed to gargle his throat with lime-water.

About five o'clock the same afternoon I was sent for, with the report that the child was much worse. I found him with a very hot skin and high fever, the whole throat being much more swollen, both inside and out, than when I saw him in the morning. Both tonsils and the whole of the soft palate were of a dark, dusky-red color, and had enlarged to such an extent as to make it almost impossible for the patient to swallow. The respiration had also become very labored and difficult. There was much congestion of the face and head.

The membrane upon the left tonsil had spread with fearful rapidity; the entire surface of the tonsil, as was the arches of the palate upon that side, being covered with a dirty, greyish slough. The patient was ordered the lime inhalations every two hours, in the manner recommended by Dr. GEIGER; that is, a large handful of lime was put in a pitcher, and about half a pint of boiling water was poured over it. The child's head was now placed over this, and he was made to inhale

its fumes. The following solution was also directed:

R. Potass. chloratis,	ij.
Tinct. ferri sesquichloridi,	ij.
Spts. ammoniae aromat.,	ss.
Aqua calcis,	ij.

Fiat. sol.

Sig. A dessert spoonful every two hours, with beef tea ad libitum.

I saw the patient about 10 o'clock that night. He had then taken two good inhalations, of about ten minutes duration each. The breathing was much better, and the swelling about the tonsils and the glands of the throat was much reduced. The membrane had not extended since the afternoon. His mother stated that the inhalations had seemed to relieve him at once. He continued to improve very rapidly under this treatment, and to-day, which is the fifth since the commencement of the attack, he is entirely well, the inflammation and all traces of the membrane having wholly disappeared.

The instantaneous relief given by the inhalations, when I have seen so many remedies signally fail in diphtheria, have led me to attribute the very fortunate and successful issue in this case entirely to their influence. I have never seen any remedy act with more promptness or satisfaction, than the lime inhalation did in this case. I would most earnestly recommend that it be tried by the profession at large.

Very respectfully, HENRY MCELDERNEY,
Act. Ass't Surg. U. S. A.

Post Hospital, Fort McHenry,
Baltimore, April 6, 1866.

Poisoning by Opium. Cured by Belladonna.

EDITOR OF MEDICAL AND SURGICAL REPORTER:

At 8½ o'clock, P. M., I was called to see an infant, two weeks old, said to have been accidentally poisoned by laudanum. On arrival I learned, that about two hours before, the babe's grandmother, intending to give paregoric, had administered 6 drops of laudanum. The infant was in a profound sleep, from which it could not be aroused; pulseless at wrist and temple, jaws clenched, respiration slow, but not stertorous, surface hot.

Pulv. ipecac. 3ss., was immediately administered, with some difficulty, followed by strong coffee—deglutition being very imperfect. Tinct. of belladonna and a magneto-electric battery were sent for. Repeated ipecac in 15 minutes without effect, though aided by passing an oiled feather up and down the cesophagus. Battery and belladonna arrived at 9, P. M. Before applying either, examined the pupils, and found

them mere pin-holes. Gave one drop of the tincture, and applied the battery, for a few minutes, communicating the current to the patient, through my own hand and that of a lady-assistant, our other hands grasping the conductor. The power was gradually increased, till unpleasant to our hands, without rousing the child, or producing any effect. Repeated belladonna at 9½ o'clock, pupil still firmly contracted. At 10, belladonna and battery repeated without effect. The battery was now abandoned, and the treatment confined to one drop of tinct. every half hour, with a little black coffee. A clergyman having been sent for, arrived at 11, P. M., and after some hesitancy in regard to the actual life of the child, baptized it—the application of the water producing no effect on the child's state. Soon after 11½, P. M., a little urine was passed, and a slight dilatation of the pupil observed; the pulse also, though yet feeble and irregular, could be noted at the wrist. At half past 12, P. M., the last dose, being a total of 8 drops of tinct. bellad., was administered. Soon after the pupil was found dilated a little beyond the natural size. Pulse 130—regular, and getting stronger—effort at vomiting, followed by occasional wild screams, and agitation of the limbs. The belladonna was evidently acting. A teaspoonful of castor oil was now given, and all other treatment abandoned.

I left—having given directions to apply the babe to the breast, every half hour, till it nursed.

Called next morning, found the little one well, not even exhausted. Oil had operated three times. Took the breast first about 2 o'clock, and several times since. For several hours had slept and screamed wildly alternately.

April 20. The child continues perfectly well. Neither I, or any one present, have a doubt, but the belladonna saved its life.

JOHN G. F. HOLSTON, A. M., M. D.
Zanesville, Ohio, April 18, 1866.

Congenital Malformation of the Oesophagus.

EDITOR MEDICAL AND SURGICAL REPORTER:

I introduce the case by the following account given me by my friend, Dr. H. S. NYE, of Putnam, Ohio.

"Putnam, Ohio, Dec. 8, 1865.

"At 2 o'clock, A. M., called to see Mrs. G—, in second labor. She informed me the waters had broken and flooded her, half an hour previous. Pains came on slowly after some hours had elapsed, and continued regularly till 9 o'clock the following evening when they were terminated by the birth of a small female child, but well formed and apparently healthy. Child did

not breathe for several minutes, but after removing mucus from its mouth, and suffering the fetal circulation to continue, it finally gasped and with difficulty breathed. After removal from the mother—it would seem to suffocate, from an accumulation of mucus in the bronchia; cease to breathe for a time, gasp imperfectly, breathe through tough bronchial mucos, which being removed from the mouth and fauces by the finger, and being held head down to facilitate the discharge of mucus, it would finally breathe again for an hour, and then the same scene would recur, and by a repetition of the same means be relieved. It seemed unable to swallow, as when any liquid was given, it immediately strangulated, and with difficulty was relieved by the prone position. The spine and chest were gently rubbed with volatile linament. After the third day the breathing seemed to be more perfect, and less mucus secretion; could swallow a little, but immediately strangulated; and on the fourth day had several spasms, and seemed apparently dead, but recovered; from the fifth day it could nurse greedily, and swallow several teaspoonsful, then strangle; put in the prone position milk run out; be relieved, nurse again and same repeated. Fluid seemed to pass down the oesophagus and met some obstruction—filling the canal to the larynx. Evidently there was an obstruction, but what could it be? The propriety of introducing a gum catheter was questioned, and decided best not to attempt it, and the eighth day the child died from starvation. I called in Dr. Holston who made a minute dissection and examination of the vital organs, who will relate the result.

H. S. NYE."

Post-mortem Examination.

The real cause of the difficulty in this case, having, during the infant's life, been a mooted question, obstruction, paralysis, etc., being surmised—the examination was conducted with minute care.

External appearance emaciated, but not to a very high degree. Rigor mortis, 12 hours after death, strong. Umbilicus cicatrised.

Incision from chin to pubis. The clavicles were disarticulated from sternum. The integuments of the neck and thorax, including the sterno-cleido mastoid, and the thoracic muscles, were dissected back, the ribs cut through at their anterior curvature, and their anterior portion, with the sternum, entirely removed—thus giving a clear view of all the viscera in situ.

The muscles were all pale, but a considerable amount of fat still remained in their interstices, as well as under the skin. Thymus gland large

The heart and great vessels were first examined. The muscular structure pale and flaccid, all the valves, as well as those of the aorta, perfect, and transparent as glass. Foramen ovale closed, but ductus arteriosus patent; right ventricle filled with black blood, left empty. Nothing abnormal in the great vessels or nerves of neck or thorax. Lungs deeply congested, but every part floating. Trachea, containing frothy mucus, lining membrane injected. On dividing the trachea, and turning back its upper and lower extremities, the source of trouble came into view, viz.: The oesophagus terminated in a *cul de sac* opposite the seventh cervical vertebra. The extremity presented no appearance of cicatrization, but appeared like the finger of a glove, perfectly smooth, and of homogeneous texture. This part much dilated. One-fourth of an inch distant, without having any connection with it, began the other extremity of the organ, also in a *cul de sac*, opening into the cardiac orifice in the usual manner, but contracted to the size of a duck quill. The upper part was at least four times the diameter of the lower.

Liver pale. Umbilical veins patent. Stomach and intestines filled with flatus, but no other contents. Bladder empty. The mucous membrane of those viscera injected. Kidneys normal, and void of fat. Gall bladder containing thin yellow bile.

JOHN G. F. HOLSTON, A. M., M. D.

Zanesville, Ohio.

assiduous in their endeavors to abate or remove all nuisances, yet the accumulated filth of months and years will render it impossible to do so with their present limited powers in a manner to satisfy themselves or the reasonable expectations of the public before the hot weather shall be upon us.

"The *Atalanta* arrived last November with the cholera which she had brought from Southampton, and from the 22d of November to the 20th of December, there were 24 deaths on Ward's Island in one particular Hospital, where the disease attacked the convalescents from fever. Owing to the coldness of the weather it did not extend, and many were led to believe that this feeble attack was a demonstration of its weakness, and that we had witnessed the last struggles of the dreaded enemy. Now, none are sanguine enough to indulge so chancing a hope. Cholera is already in Halifax, brought there by the steamer *England*, containing 160 cases of this disease, exclusive of the 40 who died on the voyage from Liverpool.

"To-day we have received from the State Department, Washington, information that the British brig *Ubla* and the bark *Hampton* had reached Bermuda with cargoes of rags, and were quarantined there on the suspicion of having the cholera. These vessels are destined soon to arrive in New York, and other vessels undoubtedly will arrive with the disease on board. At Quarantine we have only one bulk, which cannot accommodate more than 300 persons, nor have we any places where the passengers can be landed and properly cared for, and it is incumbent upon us as a board of Health to have our powers increased to meet, in case of pestilence, such an emergency.

"Moreover, there is no reason to believe that the present threatening epidemic will differ from the four previous ones. In the Summer and Fall of 1831 it appeared on the western and northern coast of England, reaching New York the following Summer—that is, on the 5th of July, 1832, when 21 cases were reported from different points in the city. In the Summer of 1848 it appeared in the same places, first in England, and then spreading along the southern shores, and then northwardly to Scotland. On the 2d of December, 1848, it was brought by the ship *New York* to this port, the vessel losing seven cases during the last week of her voyage. During the following summer the epidemic prevailed in this city. In 1855 the *Atalanta*, as stated above, arrived at this port with the same previous history of its march through Western Europe, reaching, as in previous epidemics, the southern parts of England, and then coming over to us, generally attacking America, one year after it had raged in Europe, and it is highly probable that the same course will be followed the present year.

"Cholera, then is imminent, and, whatever other places may be avoided by it, the great cities of New-York and Brooklyn, which have such free communication with each other and with all the world, can hardly fail to be exposed to its earliest attacks."

"It would seem to be destined to come and

News and Miscellany.

The Metropolitan (N. Y.) Board of Health, has been exceedingly active during its short existence, and already many nuisances have been abated. The street-cleaning contractors have been brought to their senses, and are put to strict fulfilment of their duties.

Regarding cholera, at one of the last meetings of the Board, Dr. STONE made the following report:

"The committee appointed by the Board of Health at a regular meeting held April 10, 1866, to report to this Board without delay the evidence there is of great and imminent danger to the public health in this district by reason of the impending pestilence, and what measures should in consequence thereof be taken, and what acts be done by this Board for the preservation of the public health, and which in their opinion, the public health and safety demand, beg leave to present the following report:

"Little time has elapsed since the organization of the Metropolitan Board of Health, but during this period they have been anxious and

occupy its previous haunts where filth and the neglect of all sanitary precautions, under a hot sun will develop and disseminate its virulence. In view, then, of this great danger which threatens to destroy thousands of lives and injure the commerce of the District to the extent of millions of dollars, we would recommend that an appeal be made to the Governor of the State to proclaim to the public the danger of an impending pestilence, and thus authorize the Board of Health to take such means and incur such increased expenditure as shall be necessary to accommodate the sick in the district as well as those who arrive at quarantine; to clean the streets, remove manure heaps, correct the ventilation, drainage and overcrowding of dwellings; to close or remove all buildings which are dangerous to life or health, empty and remove the contents of privies and cesspools, reopen obstructed sewers, wash out the gutters and sewers with water, in fact do all that shall be considered necessary to resist pestilence and protect human life.

"And your committee would also recommend that the Governor of the State be requested to extend this increased power of the Board to the 15th day of October. All of which is respectfully submitted."

At a subsequent meeting the following Declaration was made:

Resolved, That in the judgment of this Board, and in fact, there is presence of great and imminent peril to the public health in the Metropolitan Sanitary District of the State of New York (created by Chap. 74 of the Session Law of said State, passed February 26, 1866), by reason of impending pestilence within the meaning of the provision in relation thereto, contained in Section 16 of the said act, and the said Board does now and in good faith hereby declare that the public safety and health demand that for the preservation of the public health the said Board should take the measures and do and order and cause to be done the acts and make the expenditures (so far as this Board may find needful about said acts and measures) hereinafter specified, that is to say:

Resolved, That the measures to be taken, the acts to be done (or caused to be done) and expenditures to be made in the discharge of its duty by reason of such peril, are the following, so far as they can be specified:

1. Gathering and removing in and from built up portions of the Districts to some proper place what, if left, might in the opinion of the Board, tend to develop or increase the cholera this year.

2. Cleaning, purifying and disinfecting any building, erections, grounds or places, streets, sewers, drains, within the District, and closing any building or erection which, if not so treated, might in the opinion of this Board tend to develop or increase the cholera this year.

3. Cause improved drainage and ventilation where it can be readily done in the built up portions of the District or connected therewith, in any particular, in respect of which the condition of things if left unchanged might in the opinion of the Board tend to develop or increase the cholera this year.

4. Provide for the removal, accommodation, care and treatment of those who may this year be attacked by or sick of the cholera, or any contagious disease, and for the interment of those who may die, as the Board may find or declare needful.

5. Make and enforce, or cause to be enforced such regulations or orders for preventing the spread of cholera this year as the Board may find it needful to make.

6. Exercise any powers heretofore given to any health authority or officers applicable to cases of pestilence or contagious disease, in this District, as the Board may find or declare needful.

7. Use the proper means and agencies for the prompt and efficient exercise of the foregoing powers, and what is incident thereto in such manner as the public peril, in the opinion of the Board, may render needful to guard the public health in respect of the cholera.

8. Make such expenditures, incur such pecuniary obligations, and borrow such money about any act, measure and matter aforesaid, as this Board may find or declare needful.

Pursuant to the provisions of the 16th section of the 74th chapter of the New York Session Laws of 1866, this Board hereby declares and makes proclamation that the peril to public health in said section mentioned exists, and declare the same to continue until the 15th day of October next.

Resolved, That the foregoing resolutions and proclamation be entered at length on the minutes, and that thereunder and in said minutes the members of said Board concurring in, and approving of said resolutions, order and declaration, do severally subscribe their names, and also to a duplicate hereof.

Resolved, That a true copy of the foregoing resolutions, proclamation, order and declaration, signed by the members of this Board, who signed the original thereof, be transmitted to the Governor of the State of New York, and that his approval in writing of the same, and of the measures, acts and expenditures in the said resolutions specified, be requested, and that he be also requested to join this Board in making the foregoing declaration and proclamation.

Animal Electricity.

The number of fish provided with an electrical apparatus is not great; being limited to eighteen species of the torpedo, or two of the Gymnotus, two of the Mormyrus, and one of the Malapterurus. M. CHARLES ROBIN announces, in a paper addressed to the Paris Academy, that the ray possesses a similar apparatus. Thus there are two kinds of seafish that are decidedly electrical, the torpedo and the ray.

M. ROBIN's experiments were not of easy execution. The ray is usually caught at an hour's sailing at least from the coast, and it does not live more than twenty minutes out of its element. Owing to its size and shape, it is not easy to keep in a vessel with sea-water; nor is it possible to conduct delicate physiological and electrical experiments in a fishing-boat; so that for a long time M. ROBIN's efforts were fruitless.

Fortunately, the experimental basins now built at Concarneau, under the superintendence of M. COSTE, have removed these difficulties. The aquaria at that place are large basins in which the sea-water is constantly renewed by the tide, and in which fish may live and multiply under the most advantageous circumstances. Here M. ROBIN carried on his experiments with a galvanometer and a sufficient number of electroscopic frogs.

Sometimes the ray, when out of the water, makes violent muscular efforts, and flaps its pectoral fins. During these efforts, an electric discharge is scarcely ever obtained, but after a few seconds' rest there comes a succession of small discharges. At other times, the fish remains quiet for three or four minutes, and then begins as before to make great exertions, during which the galvanometer and the frogs give no sign of electricity, and then comes a short period of rest, when a few discharges are obtained. In some instances, however, after three or four minutes of rest, the animal suddenly and voluntarily discharges electricity. Discharges may also be obtained by pricking, pinching, or otherwise exciting the fish. But, under whatever circumstances the phenomenon be produced, it is always accompanied by a slight motion of the ocular globes and a contraction of the bronchial cavity, as also by similar contractions of the caudal fins. It is well known that similar motions are observed in the torpedo at the moment of a discharge.

Ether vs. Chloroform.

The use of chloroform as an anesthetic was lately discussed in the Paris Academy of Science, in a paper by Dr. PETREQUIN, of Lyons. He favors the use of ether, and shows that the former inconveniences attending its use have been obviated. Dr. PETREQUIN says:

"These inconveniences were removed by the etherizing bag, invented by a physician of Lyons, and also by the improved methods devised for obtaining ether perfectly pure. At present the operation of etherizing proceeds in a most satisfactory manner. The patient lies in a horizontal posture, with his head slightly raised in order to prevent his swallowing any ether; about twenty-four grammes of ether are poured at once on the sponges of the bag; the patient is directed to inhale copiously; the orifice of the bag is then closed, and the dose of ether doubled. The patient's eyes are carefully bandaged, and the profoundest silence is observed: in this way anesthesia is promptly obtained without agitation. It is easy to prevent accidents by closely observing the circulation and breathing. In general the pulse is first accelerated, then becomes regular again; were it to become concentrated, irregular, or low, the inhalations should be stopped, and air administered. As to the breathing, it is at first subdued, but soon becomes complete. If it were to become difficult or interrupted, the apparatus should be removed and the fan used. In this way there has not been a single death at Lyons by etherization for the last fourteen years,

while, according to Dr. VELPEAU's own showing, the use of chloroform is never unaccompanied by danger.

"To this paper Dr. VELPEAU replied, that there had indeed been a few deaths by chloroform, but it was not quite certain that there had been none by ether. At all events, he (Dr. VELPEAU) had for the last fifteen years been administering chloroform to several thousand patients, and had never seen any die from that cause."

American Medical Association.

Delegates.—At an adjourned meeting of "The College of Physicians of Philadelphia," the following delegates were appointed to represent the College at the approaching meeting of the American Medical Association, to be held at Baltimore, on Tuesday, the first day of May, next:

Drs. Geo. B. Wood, Isaac Hays, Geo. W. Norris, J. Cheston Morris, A. H. Fish, C. Percy La Roche, Casper Wister, Wm. Mayburry, W. Lehman Wells, S. Weir Mitchell, R. H. Townsend, John H. B. McClellan, Squire Littell, and Alfred Stillé.

"The Tridescope."

At the last sitting of the Academy of Sciences, at the Institute of France, Dr. JULES CLOQUET presented a very interesting optical instrument called a "Tridescope" by its inventor, M. R. HOUDIN, and by means of which the spectator may see deeply into the interior of his own eyes, and follow the movements which take place during the process of vision. This new discovery will be of great service to oculists, by enabling them to study the different and numerous maladies which affect the interior of the eye and injure the sight. The Academy referred the instrument and the paper which accompanied it to MM. BECQUEREL and FOUCAULT for examination.

— The United States Treasurer at Washington recently burned \$190 in greenbacks, which had been forwarded by the surgeon from a smallpox hospital at Bowling Green, Kentucky, in a sealed package. The money was supposed to be infected with the disease, and new greenbacks were sent to the hospital in exchange for it. Good! The prudent care shown by this doctor is worthy of imitation.

— Among the recent arrivals in Panama was Dr. BERTHOLD SEEMAN, formerly naturalist on the British ship *Herald*, on her voyage round the world, in 1845 to 1851. He is on his way to Nicaragua, to make reports in regard to the mines of Lemon and Matagalpa.

— Remarkable results have been obtained by M. SCHLOSSING in the production of exceedingly high temperature by the combustion of gas with air. By regulating the quantity of hydrogen and air brought together at the time of combustion, a considerable range of temperature can be obtained, the highest named in a communication recently made to the Academie des Sciences of Paris, by ST. CLAIRE DEVILLE, being 2 736 deg. Cent.

